Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) In a wheel balancer, the improvement comprising:

a shaft adapted for receiving a wheel/tire assembly, said shaft having a longitudinal axis and being rotatable about said axis so as to rotate ~~a~~ the wheel/tire assembly removably mounted thereon;

a motor operatively connected to the shaft for rotating said shaft about ~~its~~ a longitudinal axis of the shaft, thereby rotating the wheel/tire assembly;

a load roller for applying a generally radial force to the wheel/tire assembly during rotation of said wheel/tire assembly so that loaded wheel/tire assembly measurements may be determined while the force is applied thereto;

a control circuit responsive at least to the loaded wheel/tire assembly measurements and to a tire stiffness value to make a determination of a predetermined uniformity parameter.

2. (original) The wheel balancer as set forth in claim 1 wherein the tire stiffness value is provided by a measuring device separate from but electrically connected to the balancer.

3. (original) The wheel balancer as set forth in claim 1 wherein the tire stiffness value is provided by a suspension tester.

4. (currently amended) The wheel balancer as set forth in claim 1 wherein the tire stiffness value is provided by a manually operable input device ~~which the user may operate to input a tire stiffness value~~.

5. (currently amended) The wheel balancer as set forth in claim 4 further including a stored database of tire stiffness data, said manually operable input device being actuable by an operator to select ~~the~~ a desired tire stiffness value from said database.

6. (currently amended) The wheel balancer as set forth in claim 1 wherein the tire stiffness value is determined by the control circuit from ~~the~~ a change in position of the load roller resulting when forces of different magnitudes are applied to the wheel/tire assembly by the load roller.

7. (original) The wheel balancer as set forth in claim 1 wherein said control circuit is responsive to a tire parameter to adjust the force applied by the load roller.

8. (original) The wheel balancer as set forth in claim 1 wherein the loaded wheel/tire assembly measurements are measurements of loaded radial runout or variation in radial force.

9. (currently amended) The wheel balancer as set forth in claim 1 including stored wheel/tire assembly uniformity specifications, the control circuit being programmed to display a message to ~~the~~ an operator if measured uniformity is outside of the specifications.

10. (original) The wheel balancer as set forth in claim 1 further including a feedback sensor to measure the force generated by the load roller.

11. (original) The wheel balancer as set forth in claim 1 wherein the predetermined uniformity parameter is force variation.

12. (currently amended) The wheel balancer as set forth in claim 1 wherein the control circuit determines correction weight magnitudes and positions for correcting ~~the~~ an effect of the predetermined uniformity parameter.

13. (currently amended) The wheel balancer as set forth in claim 1 further including a sensor for measuring ~~the~~ runout of ~~the~~ a wheel rim of the wheel/tire assembly at ~~the~~ a bead seat of said wheel rim, said control circuit being responsive to the measurements of wheel rim runout, and responsive to ~~the~~ measured loaded radial runout of the wheel/tire assembly to determine an angular remount position of ~~the~~ a tire on the rim to minimize a predetermined uniformity parameter of the tire or wheel/tire assembly.

14. (currently amended) The wheel balancer as set forth in claim 13 further including a display to indicate to ~~the~~ a user said angular remount position of the tire with respect to the rim.

15. (original) The wheel balancer as set forth in claim 14 wherein the control circuit controls the display to indicate the value the uniformity parameter would have if the tire were mounted to the rim at said angular remount position.

16. (currently amended) The wheel balancer as set forth in claim 1 wherein the load roller is adapted to move radially during ~~the~~ determination of loaded runout.

17. (currently amended) In a wheel balancer having a shaft adapted for receiving a wheel/tire assembly, said assembly including a wheel and a tire mounted thereon, said shaft having a longitudinal axis and being rotatable about said axis so as to rotate ~~a~~ the wheel/tire assembly removably mounted thereon, a motor operatively connected to the shaft for rotating said shaft about ~~its~~ a longitudinal axis of said shaft, thereby rotating the wheel/tire assembly, and a load roller for applying a generally radial force to the wheel/tire assembly during rotation of said wheel/tire assembly, a method comprising:

determining ~~the~~ loaded wheel/tire assembly measurements while the force is applied to the wheel/tire assembly;

providing a tire stiffness value for the wheel/tire assembly;

determining a predetermined uniformity parameter of the tire or wheel/tire assembly at least in part from the loaded wheel/tire assembly measurements and the tire stiffness value.

18. (original) The method as set forth in claim 17 wherein the tire stiffness value is provided by a measuring device separate from but electrically connected to the balancer.

19. (original) The method as set forth in claim 17 wherein the tire stiffness value is provided by a suspension tester.

20. (currently amended) The method as set forth in claim 17 wherein the tire stiffness value is provided by a manually operable input device operated by ~~the~~ a user.

21. (currently amended) The method as set forth in claim 20 further including a stored database of tire stiffness data, said manually operable input device being actuable by an operator to select ~~the~~ a desired tire stiffness value from said database.

22. (currently amended) The wheel balancer as set forth in claim 17 wherein the tire stiffness value is determined from ~~the~~ a change in position of the load roller resulting when forces of different magnitudes are applied to the wheel/tire assembly by the load roller.

23. (original) The method as set forth in claim 17 wherein a control circuit output is adjusted in response to a tire uniformity parameter.

24. (currently amended) The method as set forth in claim 17 including measuring wheel/tire assembly uniformity and comparing stored wheel/tire assembly uniformity specifications with the measured uniformity.

25. (original) The method as set forth in claim 17 further including measuring the force generated by the load roller.

26. (currently amended) The method as set forth in claim 17 including the step of determining correction weight magnitudes and positions for correcting ~~the~~ determined imbalance.

27. (currently amended) The method as set forth in claim 17 further including measuring ~~the~~ runout of ~~the~~ a wheel rim of the wheel/tire assembly at ~~the~~ a bead seat of the wheel rim, and determining an angular remount position of the tire on the rim to minimize some predetermined uniformity parameter of the wheel/tire assembly.

28. (currently amended) The method as set forth in claim 27 further including indicating to ~~the~~ a user said angular remount position of the tire with respect to the rim.

29. (currently amended) The method as set forth in claim 27 further including displaying to ~~the~~ a user the value the uniformity parameter would have if the tire were mounted to the rim at said angular remount position.

30. (original) The method as set forth in claim 17 wherein the load roller is adapted to move radially during the determination of loaded wheel/tire assembly measurements.